



North Monterey County Unified School District

Comprehensive Facilities Master Plan Services
Presentation to the Board of Trustees
09.12.2019

THINK^{MK}
INTELLIGENT PLACES

Who we are | the team

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Project Architect



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Partner
Project Director



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Partner
Project Advisor

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Planning Strategies
Director



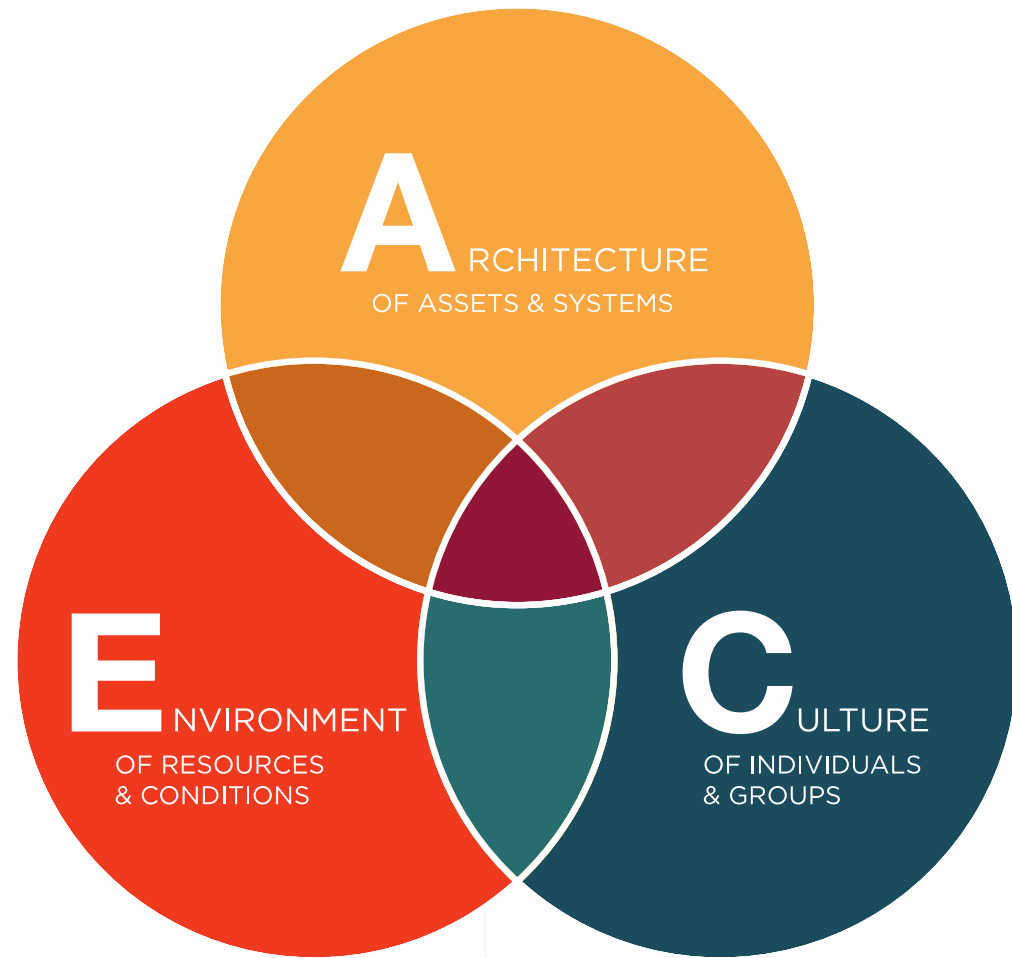
Presentation Overview

1. Introductions
2. Key issues facing NMCUSD
3. About MKThink
4. Our proposed process
5. Relevant Case Studies
6. Summary & Discussion

The problems to solve

- Facilities can't accommodate current enrollment
- Aging facilities in an era of increasing stress on physical resources
- Challenge engaging public to support school improvements
- Scarce funds to build your way out of the problem

Who we are | a unique, evidence-based approach to place making



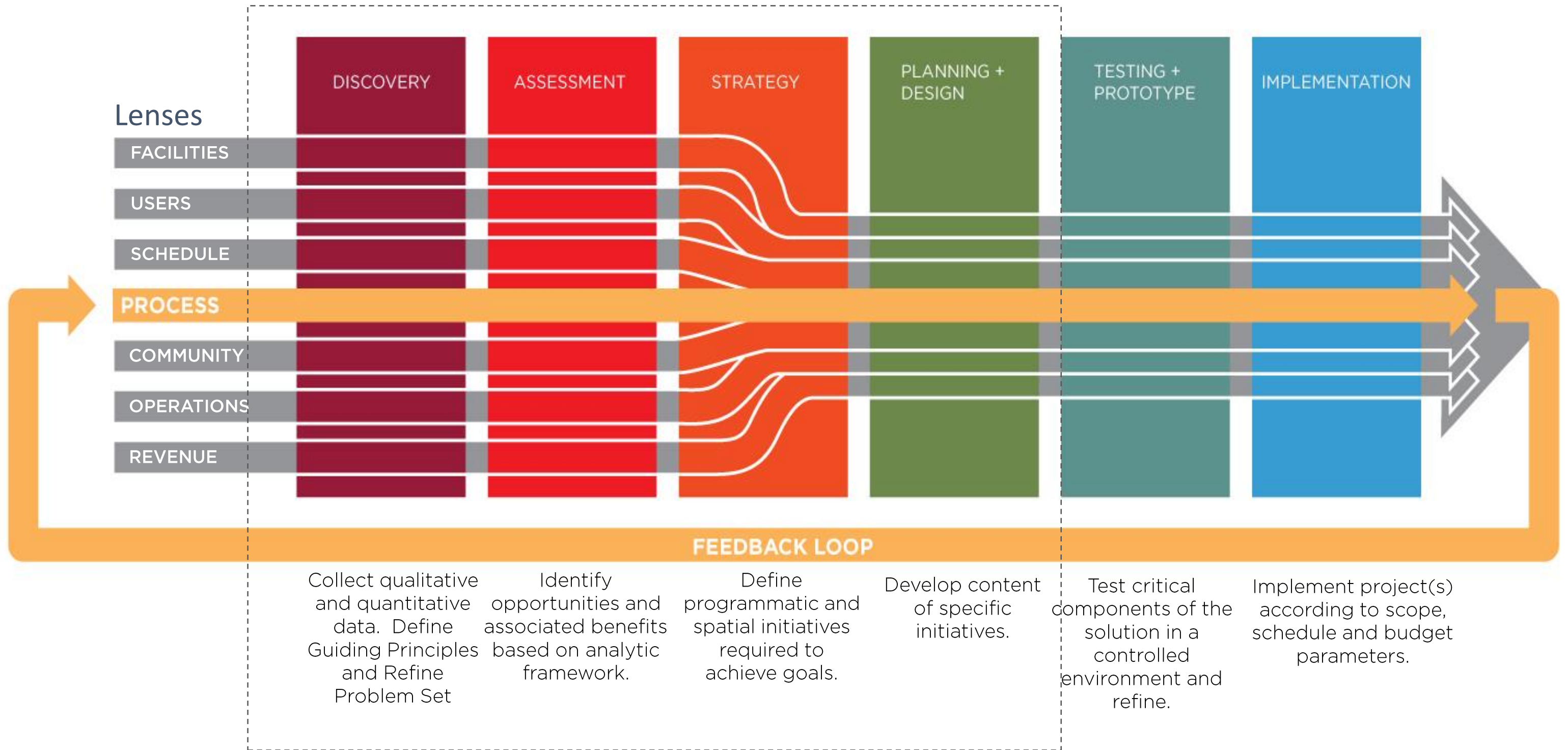
Experience | cross-sector knowledge + deep expertise in K12 education

Robert Half
University of Santa Clara
University of Santa Clara School of Law
University of Santa Clara Business School
Stanford Law School
Stanford School of Medicine
Stanford Graduate School of Education
Stanford LBRE
Stanford Medicine: Lucile Packard Hospital
Stanford Management Company Children's
✓ San Francisco Unified School District
City of Dublin
City of Emeryville
City of Davis
✓ Emery Unified School District
Santa Clara Valley Water District
Sonoma County Library
Golden Gate University
WeWork
✓ Project Frog:
 Scotts Valley USD Santa Ana USD
 Fremont USD Long Beach USD
 New Haven USD Redondo Beach USD
 South SF USD Los Angeles USD
 Oakland USD Jacoby Creek SD
 Evergreen ESD National Parks Service

✓ Arlington Unified School District, VA
AltSchool
✓ Berkeley Unified School District
Hillbrook School
✓ Oakland Unified School District
Town School for Boys
UC Santa Cruz
Financial Engines
General Motors
Marin Country Day School
Midpeninsula Regional Open Space
Mozilla, Inc.
VMWare
The Nature Conservancy
Jupiter Communications
University of San Francisco
UC Hastings
✓ UC Berkeley, Boalt Hall School of Law
Hawaii Department of Education
University of Hawaii, Manoa
Occidental College
San Francisco Zoo
San Francisco SPCA

✓ Pre-K-12 Public School Districts

MKThink Approach | An Integrated, Evergreen Process



Approach for NMCUSD | Master Plan Workplan

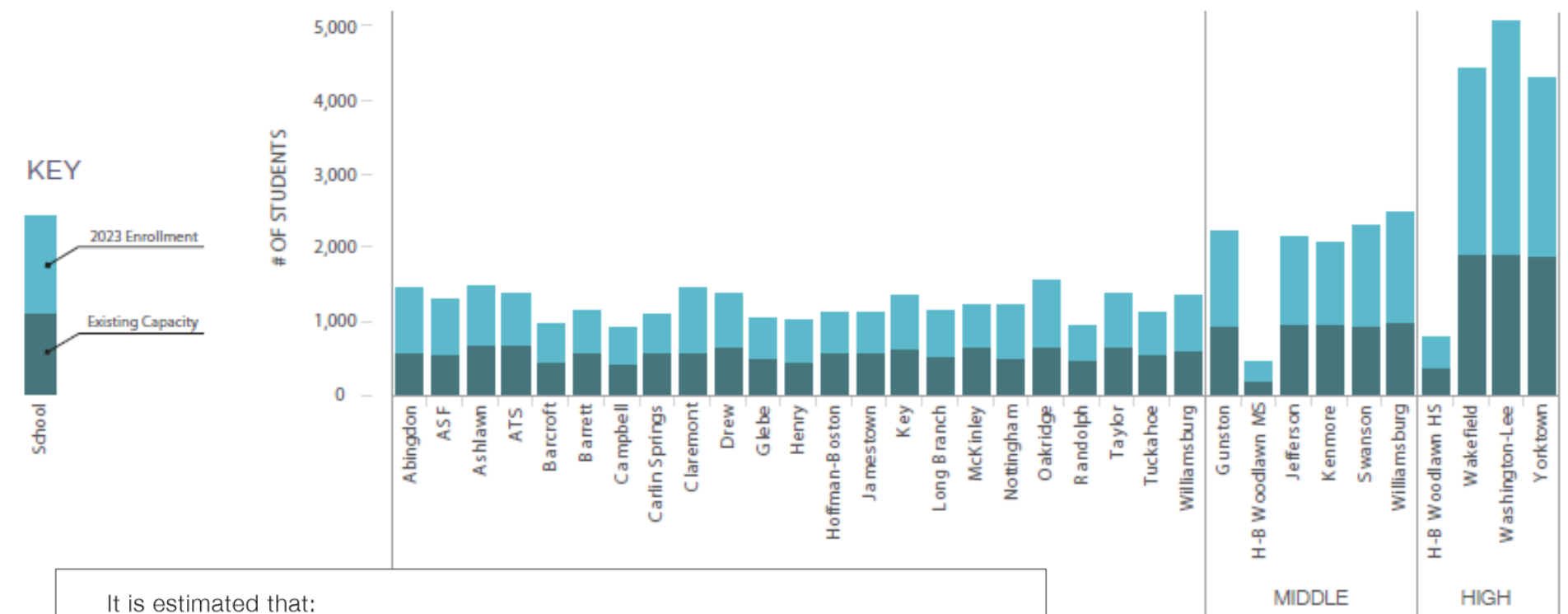
	DISCOVERY	ASSESSMENT	STRATEGY	PLANNING
1.1 MEET WITH DISTRICT FACILITIES COMMITTEE	Convene District Facilities Steering Committee, Goal & objective alignment			
1.2 a COMMUNITY OUTREACH	Engage community members on Facilities Master Plan process through in-person workshops & digital forums			
1.2 b DATA COLLECTION & GAP ANALYSIS	Assess completeness & logic of existing data & conduct gap analysis to ID any additional necessary outstanding data			
1.3 DEVELOP CONDITIONS (NEEDS) ASSESSMENT - CURRENT		Data collection & review process, evaluating existing site conditions, curriculum & educational goals of District		
1.4 DEVELOP CONDITIONS (NEEDS) ASSESSMENT - FUTURE		Assist with prioritizing short & long-term District needs, incorporating community needs & recommendations for repairs & upgrades, etc		
1.5 DEMOGRAPHICS & ENROLLMENT PROJECTIONS		Review & update demographic study with housing market & enrollment projections studies, & provide sizing recommendations		
1.6 CAPACITY & UTILIZATION STUDY & DETERMINATION OF ELIGIBILITY FOR STATE FUNDING		Perform school site capacity study, including facilities inventory. Provide recommendations on max site sizes, possible additions or new sites		
1.7 FACILITIES EQUITY STUDY		Analyze and compare teaching and support spaces between the school sites, determine need for changes or additions		
1.8 DEVELOP FUTURE FACILITIES NEEDS, ALTERNATIVES & ED SPECS			Assist in establishing educational specifications to reflect District's facilities standards & educational goals	
1.9 COST ESTIMATES			Identify and project all costs associated with recommendations	
1.10 PREP FINAL DIGITAL FACILITIES MASTER PLAN				Help prep final digital Facilities Master Plan to be uploaded to District's website & accessed by District's constituents.
1.11 FACILITATION OF FC PRESENTATION				Assist with facilitation of FC presentation/discussion of findings & recommendations to Governing Board in workshop setting
1.12 PRESENTATION TO GOVERNING BOARD				Assist with presentation of draft Facilities Master Plan to Governing Board for feedback prior to finalization & approval by Board

Arlington Public Schools - Case Study

Problem: Projected Enrollment Beyond Capacity Across the District

EXISTING CONDITIONS OF ARLINGTON PUBLIC SCHOOLS

2023 Projected Enrollment vs. Existing Capacity of APS



It is estimated that:

HIGH SCHOOLS

will grow by 1,007 students in 2018, plus another 1,972 students by 2023

151% increase by 2023

MIDDLE SCHOOLS

will grow by 1,328 students in 2018, plus another 497 students by 2023

37% increase by 2023

ELEMENTARY SCHOOLS

will grow by 1,772 students in 2018, plus another 497 students by 2023

46% increase by 2023

FOOTNOTE

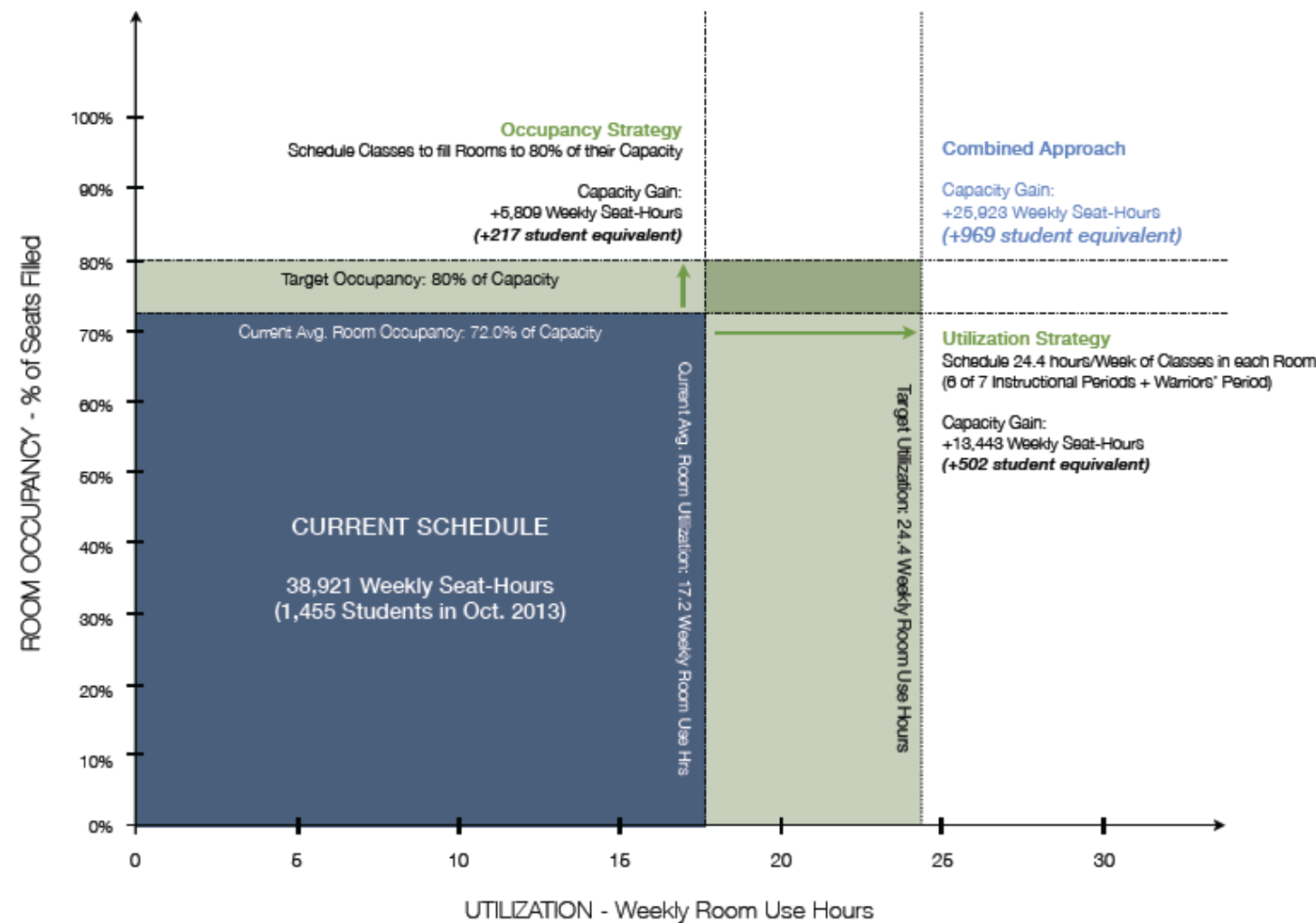
Current and projected enrollment figures are based on the APS, Facilities Planning Report "Building Capacities and Projected Student Enrollment for School Year 2014-2023."



Arlington Public Schools – Case Study

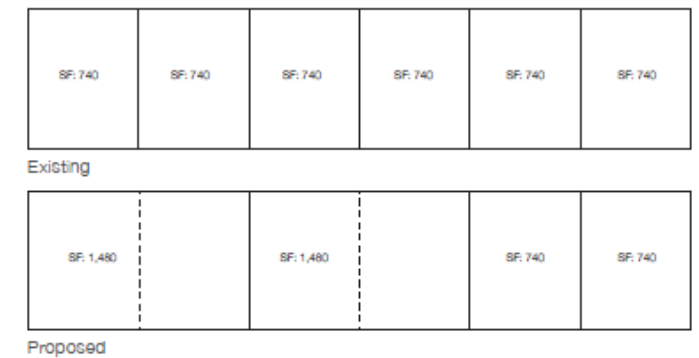
Scheduling and Rightsizing Strategies

WAKEFIELD HIGH SCHOOL

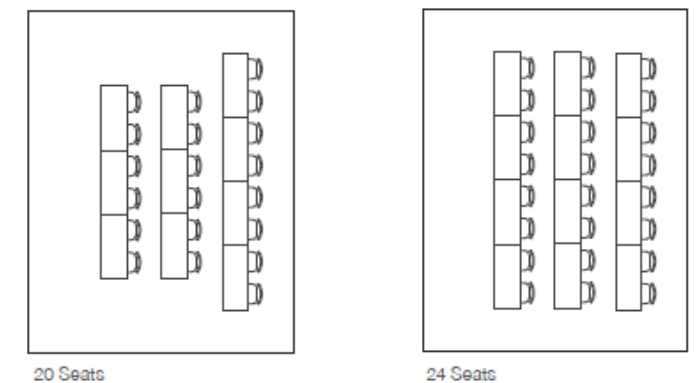


1. Introduce Scheduling software
2. Capture latent capacity
3. Use additional spaces

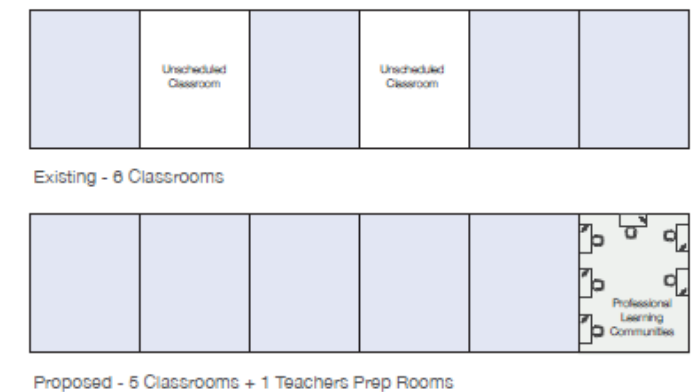
2A. Classroom Rightsizing: modify room size to better match class size



2B. Capacity Redefinition: adjust sf/student allocations to increase room capacities. This can be accomplished with the right furniture/technology that supports the learning environment.

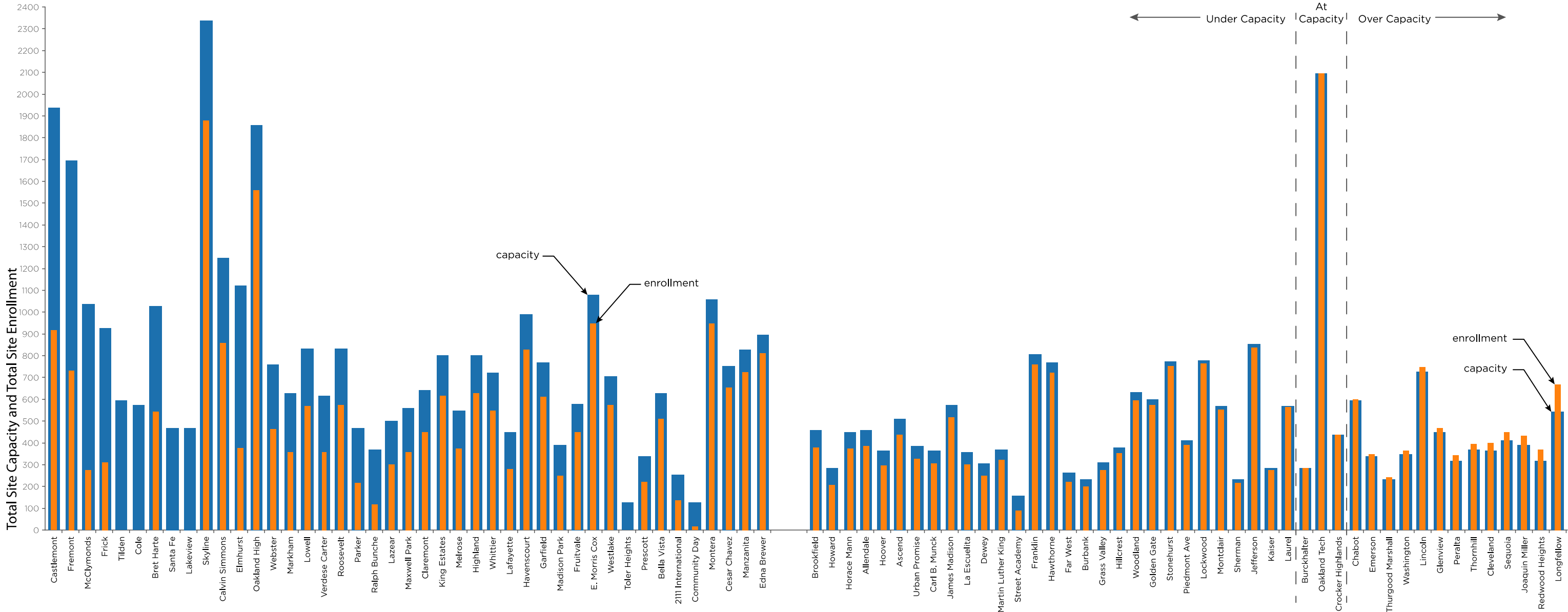


2C. Professional Learning Communities: provide collaborative teacher work areas for each professional learning communities, classrooms not associated with individual teachers enables higher utilization



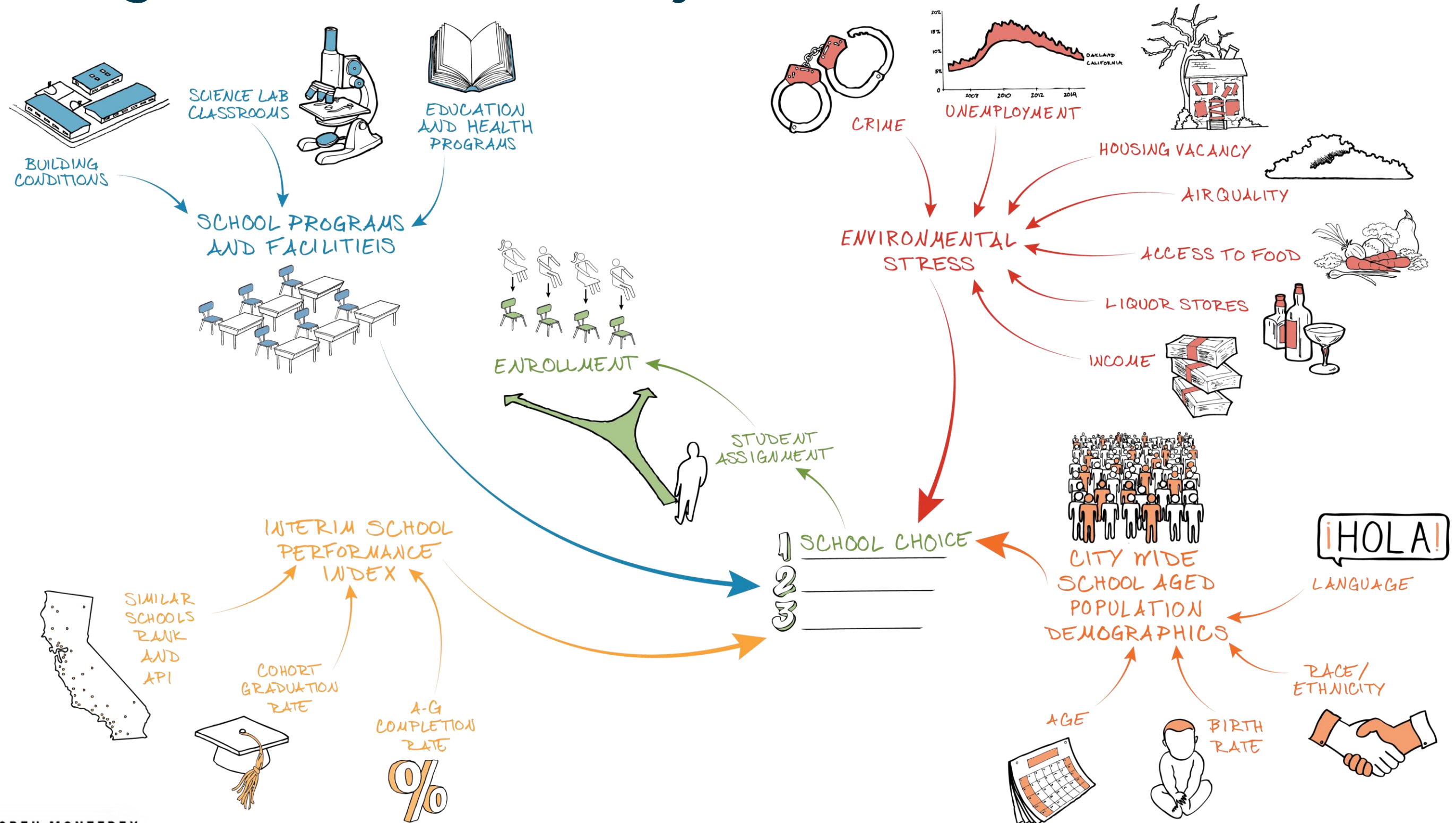
Oakland Unified School District - Case Study

Problem: Restore voter trust and pass a \$600 million bond with declining enrollment



Oakland Unified School District - Case Study

Assessing OUSD's cultural ecosystem



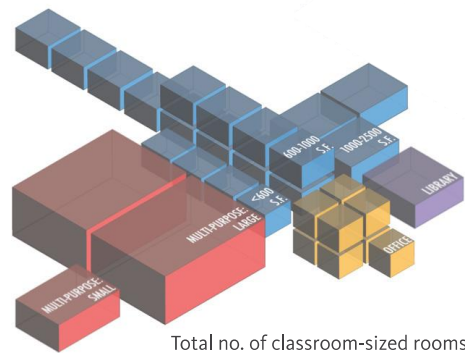
Oakland Unified School District – Case Study

Assessing facility characteristics

OUSD Facility Comparison Study

Loading Standards		
Current	25/28/30	Contract Max.
K-3: 20	K-5: 25	K: 27
4-8: 24	6-8: 28	1-3: 30
9-12: 27	9-12: 30	4-5: 31
		6-12: 32

Extra-small Elementary School



Total no. of classroom-sized rooms (including 3 specialty-use rooms)

12

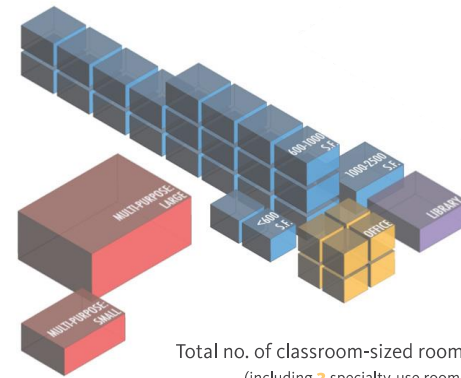
Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	1.5	30	37.5	40.5
1	1.5	30	37.5	45
2	1.5	30	37.5	45
3	1.5	30	37.5	45
4	1.5	36	37.5	46.5
5	1.5	36	37.5	46.5
specialty-use	3	192	225	268

Total no. of students

Similar sites (11-14 rooms)

6

Medium Elementary School



Total no. of classroom-sized rooms (including 3 specialty-use rooms)

21

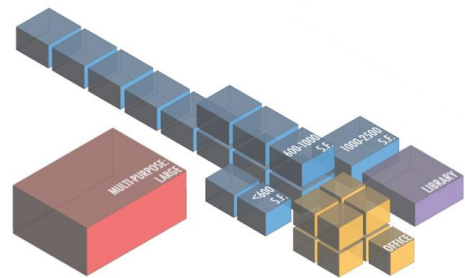
Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	3	60	75	81
1	3	60	75	90
2	3	60	75	90
3	3	60	75	90
4	3	72	75	93
5	3	72	75	93
specialty-use	3	384	450	537

Total no. of students

Similar sites (21-28 rooms)

17

Small Elementary School



Total no. of classroom-sized rooms (including 3 specialty-use rooms)

15

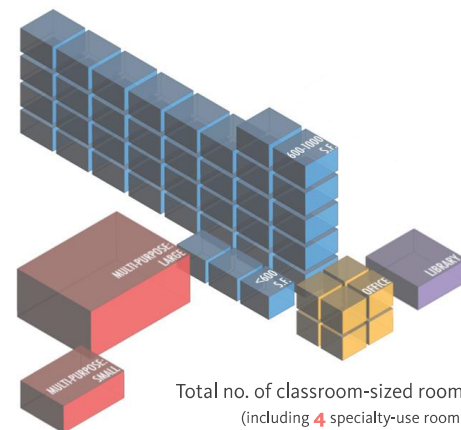
Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	2	40	50	54
1	2	40	50	60
2	2	40	50	60
3	2	40	50	60
4	2	48	50	62
5	2	48	50	62
specialty-use	3	256	300	358

Total no. of students

Similar sites (15-20 rooms)

17

Large Elementary School



Total no. of classroom-sized rooms (including 4 specialty-use rooms)

34

Grade	No. of classes (including split-level classes)	Current loading	Capacity at:	
			25/28/30 loading	Contract Max. loading
K	5	100	125	135
1	5	100	125	150
2	5	100	125	150
3	5	100	125	150
4	5	120	125	155
5	5	120	125	155
specialty-use	4	640	750	895

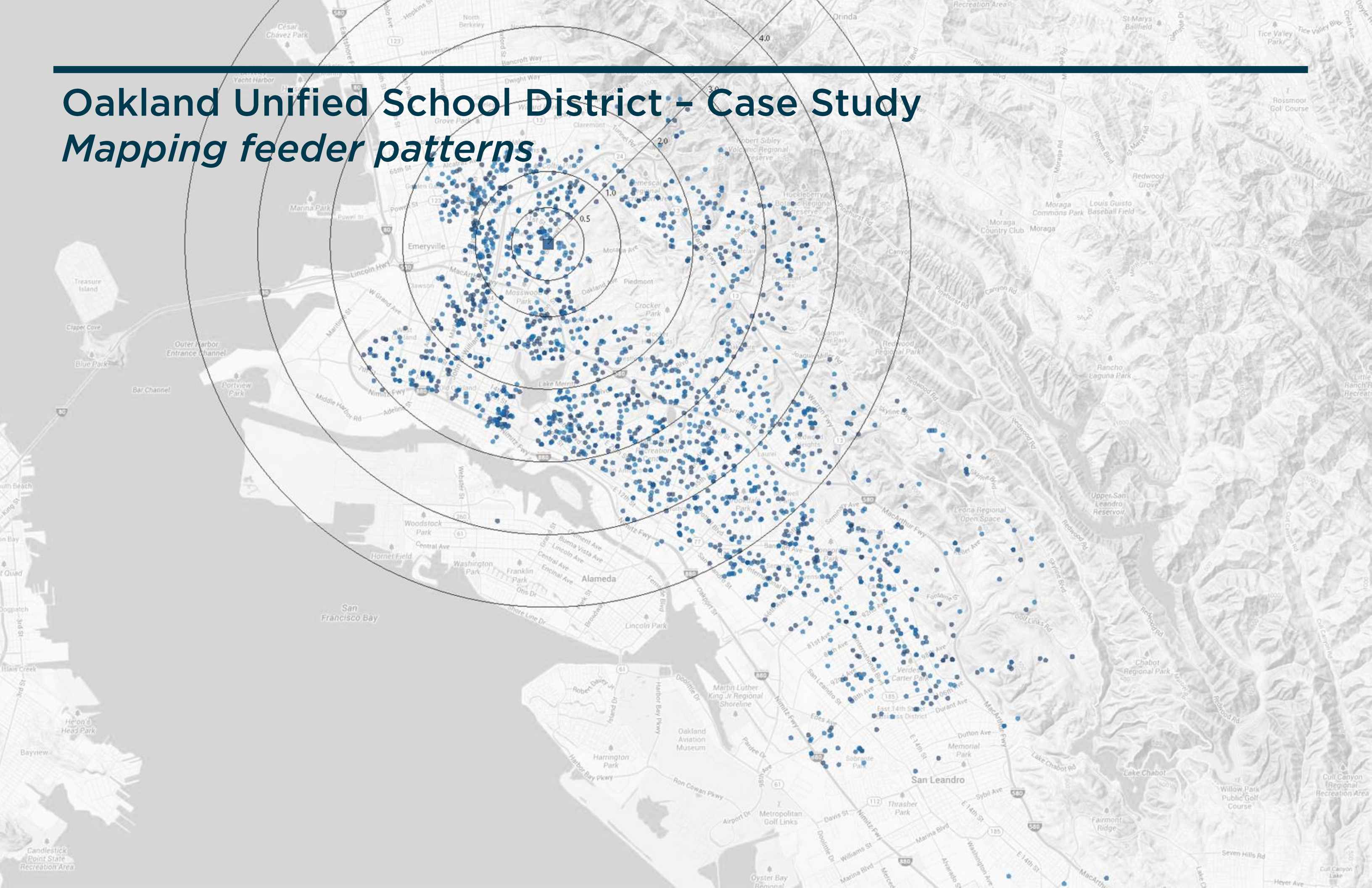
Total no. of students

Similar sites (29+ rooms)

19

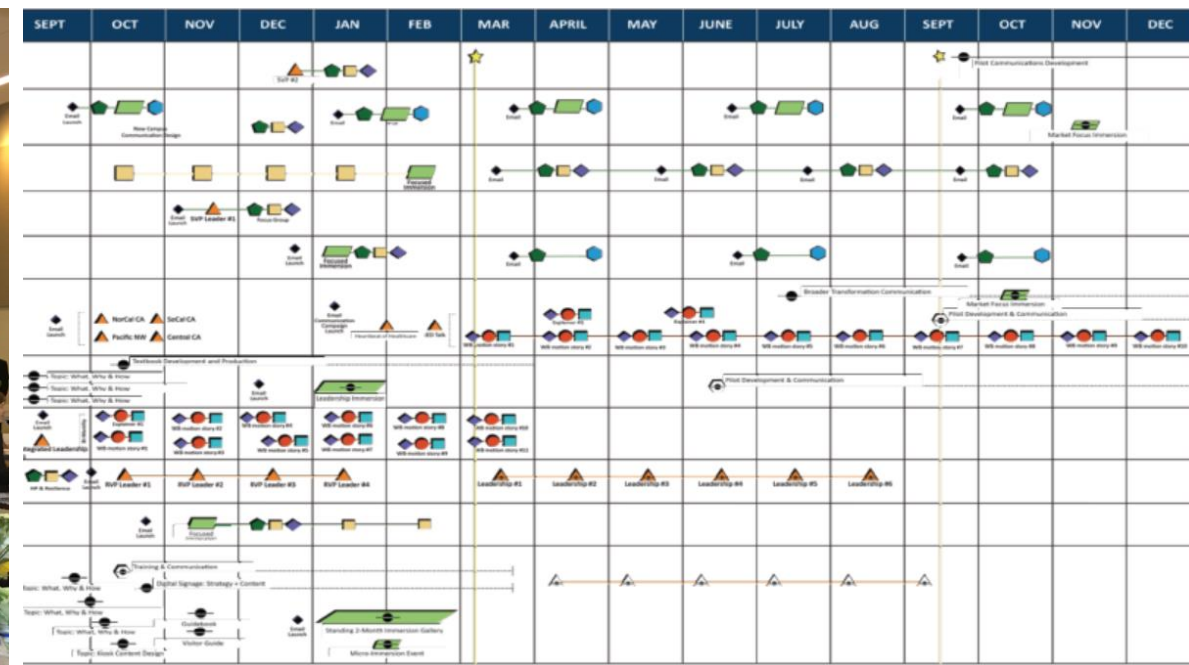
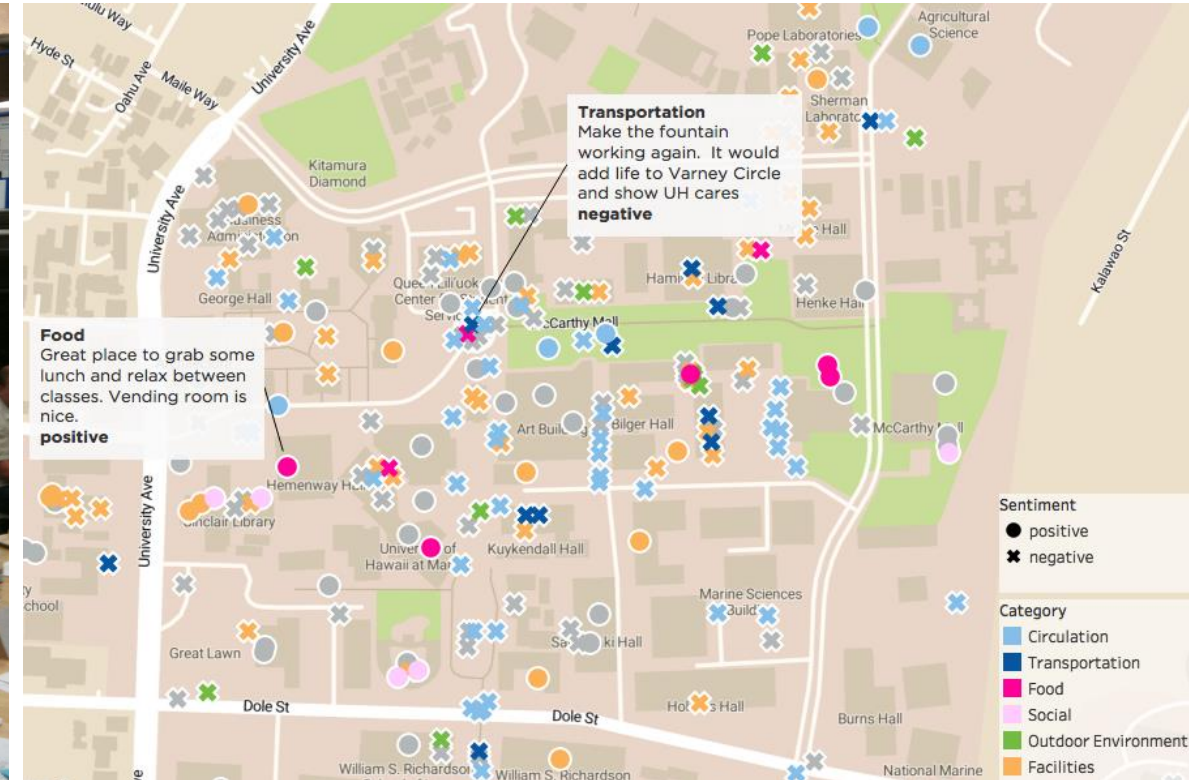
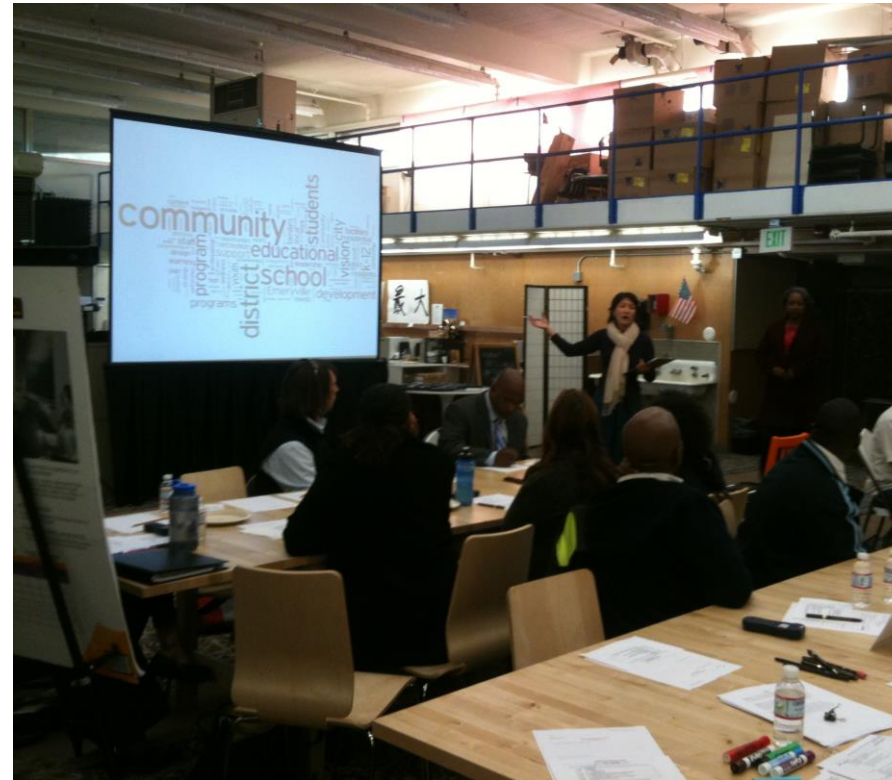
Oakland Unified School District – Case Study

Mapping feeder patterns



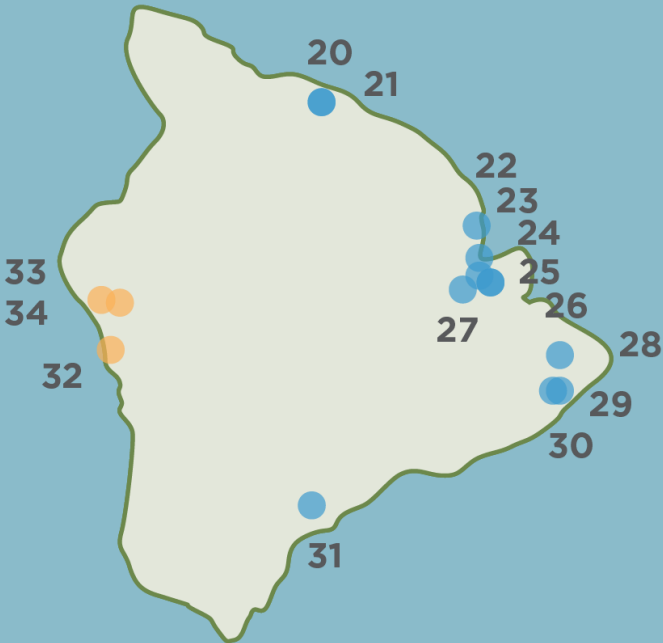
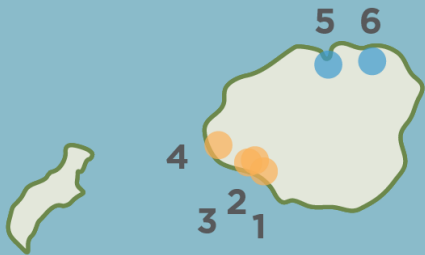
Oakland Unified School District - Case Study

Engaging the community



Hawaii Department of Education: Case Study

Problem: Cooling all Hawaii schools for \$100M



KEY

- **Dry and Warm**
Annual Precipitation: 20-40 inches
Annual Average Minimum Temperature: 50-55°F
- **Rainy and Warm**
Annual Precipitation: 80-200 inches
Annual Average Minimum Temperature: 40-60°F

- | | |
|--|---|
| 1 Waimea HS | 18 Kamehameha III ES |
| 2 Niihau HS & ES | 19 Hana ES & HS |
| 3 Waimea Canyon MS | 20 Honokaa Int & HS |
| 4 Kekaha ES | 21 Honokaa ES |
| 5 Hanalei ES | 22 Kalaniana'ole ES & Int |
| 6 Kilauea ES | 23 Haaheo ES |
| 7 Waialua Int & HS | 24 Hilo Union ES |
| 8 Waialua ES | 25 Hilo Int |
| 9 Haleiwa ES | 26 Hilo HS |
| 10 Kahuku ES | 27 De Silva ES |
| 11 Kahuku Int & HS | 28 Keonepoko ES |
| 12 Molokai MS | 29 Pahoa Int & HS |
| 13 Molokai HS | 30 Pahoa ES |
| 14 Kaunakakai ES | 31 Kau HS & Pahala ES |
| 15 Lahainaluna HS | 32 Kahakai ES |
| 16 Nahienaena ES | 33 Kealakehe ES |
| 17 Lahaina Int | 34 Kealakehe HS |

FIND YOUR SCHOOL:

SCHOOL OVERVIEW

District	Leeward
Complex	Campbell
Climate Type	Arid
Site Acreage	-
# of Structures	-
# of Portables	-
total Gross SF	-
Building Typologies	Ribbon, Portable, Donut
Landscape Coverage	Grass, Asphalt, Concrete
Roof Color(s)	Black, Light Grey, Brown, White

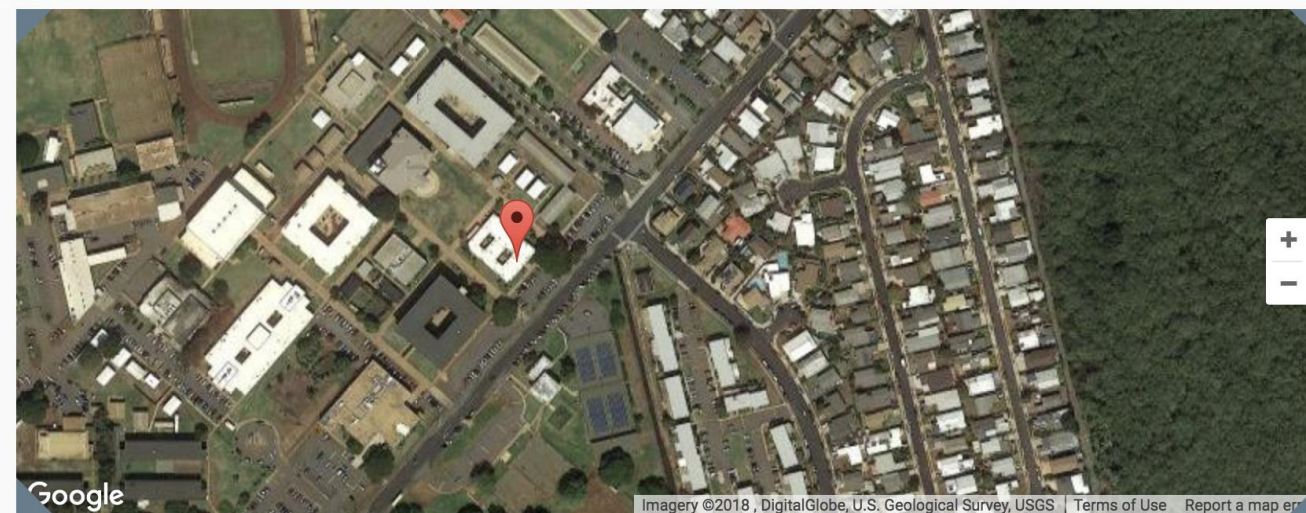
CURRENT WEATHER

@ Kaimiloa Elementary (0.43 miles away)
Last Update : 2018/01/29 09:53

75.4 °F



Dew Point : 63.3 °F
Humidity : 66 %
Precip Rate : 0 in/hr
Precip Accum : 0 in
Solar Rad : 245.21 W/m²



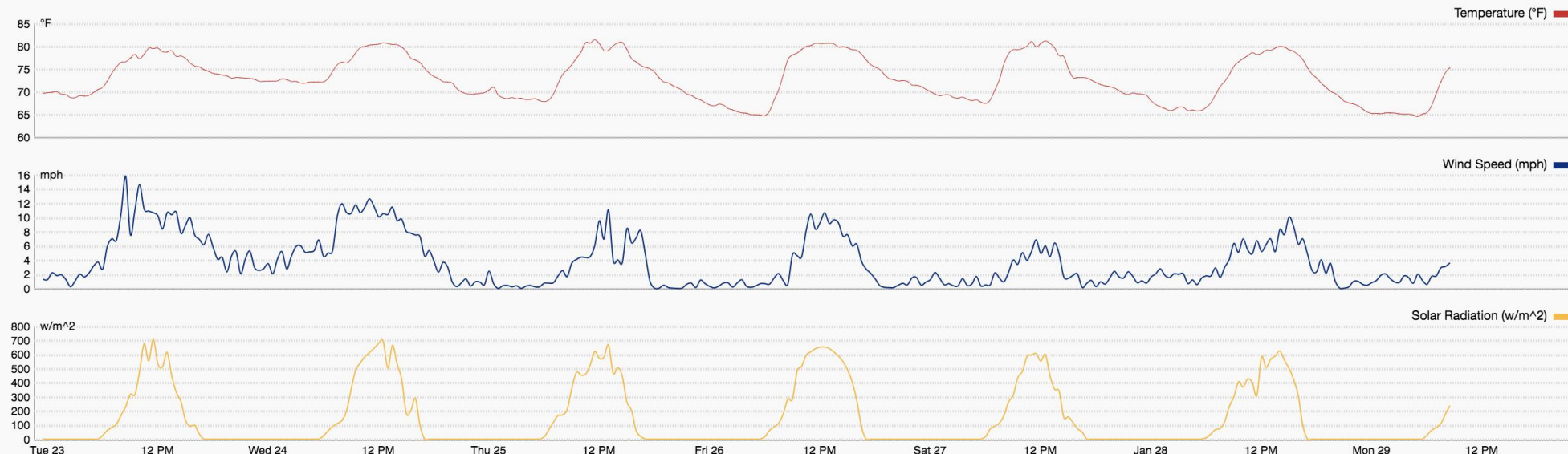
RECENT WEATHER

@ Kaimiloa Elementary (0.43 miles away)

Selected: 2018-01-23 to 2018-01-29

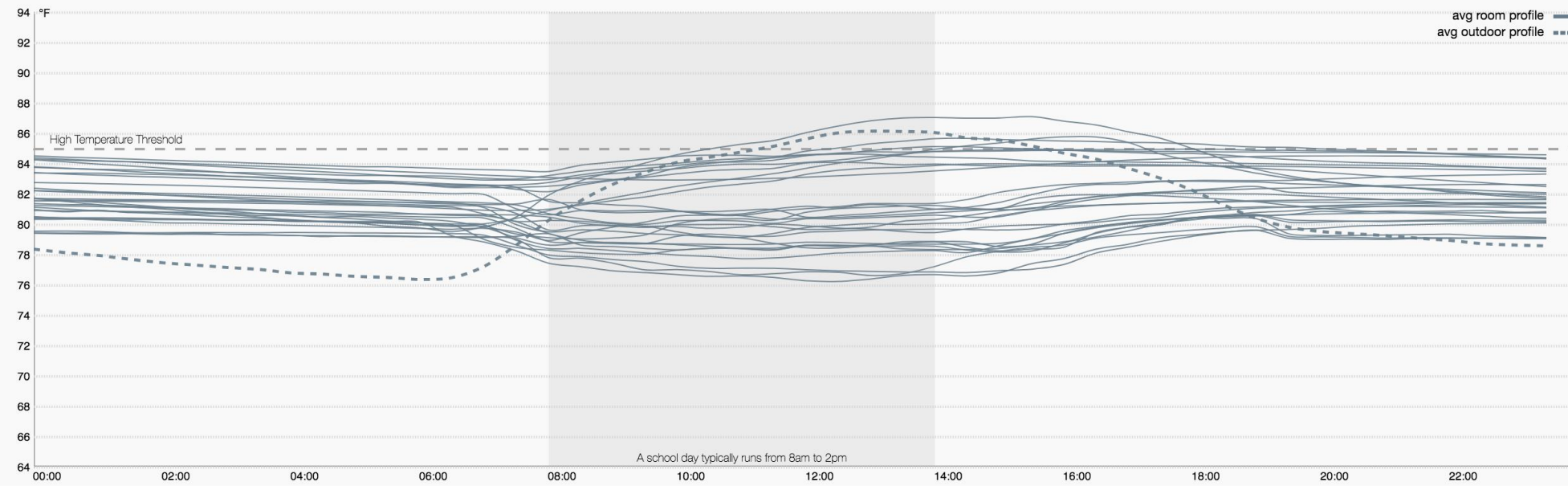
JANUARY 2018						
SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Download Selected Data



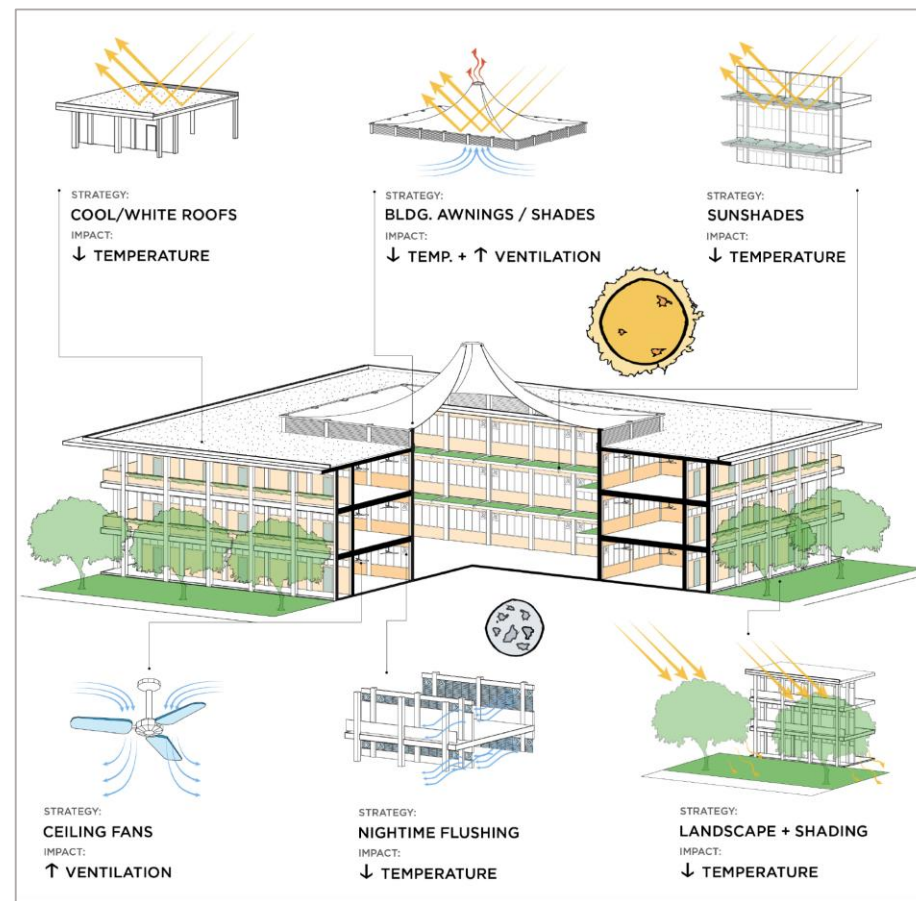
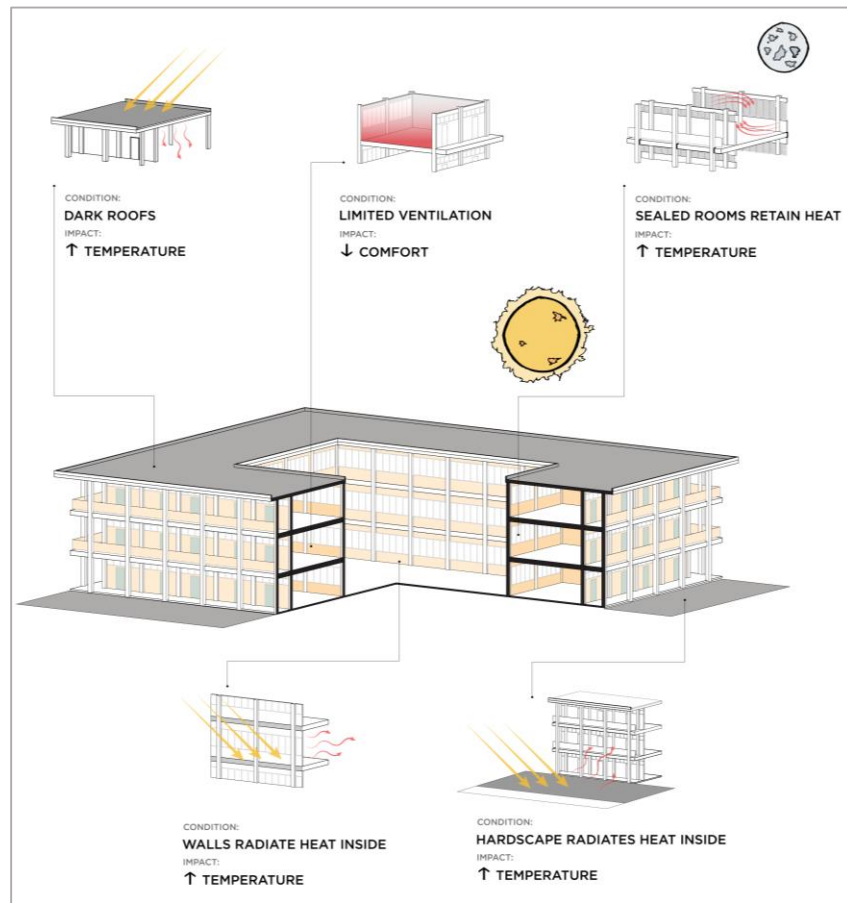
CLASSROOM TEMPERATURE PROFILES

Cafeteria E	Cafeteria N	Cafeteria S	Cafeteria W
D102	D105	D109	D112
D202	D203	D205	D207
D209	D210	D212	D302
D303	D305	D307	D309
D310	D312	DCourt	F2
J105	J109	N	N202
O102	O104	O105	O107
O201	O202	O203	O204
O205	O206	O207	O301
O302	O303	O304	O305
O307	O309	O310	OCourt E
OCourt W	P11	P19	P20
P7			



Hawaii Department of Education: Case Study

Developing Cost Effective Passive Design Strategies



Grounded in a strong architectural practice



Why MKThink?

1. The traditional, architecture-focused process is no longer an option
2. Cross-disciplinary experience with deep understanding of California K-12, regulatory and financing environments
3. Unique, evidence-based approach focused on optimizing student, teacher staff outcomes
4. Integration of both quantitative and qualitative data helps inform a true understanding of the issues and inform better decision making
5. Commitment to understanding and engaging community stakeholders
6. Proven record of uncovering and leveraging hidden value for our clients with significant operational and capital cost savings
7. Long-term commitment with clients to carry initiatives and projects through to completion